

was evacuated.—*Verhandlungen der deutschen Gesellschaft für Chirurgie*, XXIII Kongress, 1894.

**V. Experimental Studies in the Transplantation of the Intermediary Cartilage.** By Dr. HELFERICH (Greifswald). The observer has demonstrated by a variety of preparations that the transplantation or replantation of the intermediary cartilage from the ulna of the rabbit is possible without destroying the longitudinal growth of the bone. The microscopic examination also corroborates the conclusion.

In a large number of experiments (131 in all), a pronounced curving of the leg operated upon was observed to take place. This is the result of a broad union of the ulna at its seat of operation with the radius,—in fact, a union of the epiphysis of the ulna with the diaphysis of the radius.

It was especially observed that there was often a compensating lengthening of the epiphysis, probably as a result of the apposition on the sides of the joint cartilages.—*Verhandlungen der deutschen Gesellschaft für Chirurgie*, XXIII Kongress, 1894.

JAMES P. WARBASE (Brooklyn).

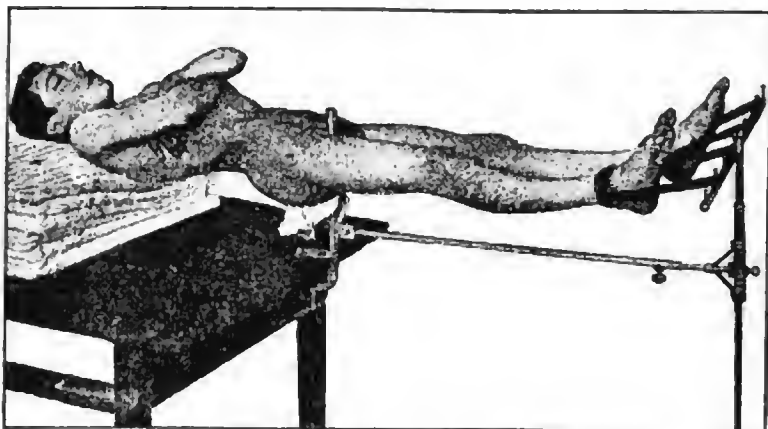
**VI. Extension Apparatus for the Application of Plaster Bandages to the Lower Extremities and to the Pelvis.** By Dr. P. BRUNS (Tübingen). The extension apparatus used for this purpose at the surgical clinic at Tübingen was first devised and described by V. Bruns some years ago. The original device has been modified and improved upon by the present professor of surgery there, P. Bruns, and is described by him as follows:

As can be seen from the illustration the apparatus consists essentially of two parts: a pelvic support which supplies counter-extension by pressure upon the perineum, and a movable rake-like attachment to which leather straps encircling the ankles are attached, thus securing extension of both legs. The sides and back of the buttocks, and the entire surface of the lower extremities are thus left free on all sides, and the bandage can be most conveniently applied. Extension

can be made at will upon either side till the two legs are as nearly of equal length as the circumstances will allow. The control of this extension is rendered easier by the fact that the body is quite straight, and the legs are in exactly the same relative position.

Lightness and ease of transportation are secured by the use of iron tubing, which can be easily separated into the four pieces which compose the apparatus.

Its most frequent use is in the application of plaster bandages in cases of coxitis, especially where contractures exist which must be overcome, and bandages applied during narcosis. In fractures of the



femur, accompanied by shortening or angulation, requiring the use of extension during the application of the plaster bandages, the apparatus is highly recommended. Bruns uses it, too, for the securing of exact straightness after osteotomy on one or both sides for the correction of genu valgum, and then applies the plaster.

The advantages secured by the use of such an apparatus are at once apparent. It can be screwed fast to any table by the use of a clamp. Since the lower extremities and the pelvis are completely exposed on all sides, the plaster bandages can be readily applied from the ankle to the navel. The patient is securely and comfortably held in position without any further help, and the operator is thus able, if

necessary, to dispense entirely with assistants. Most important of all is the fact that uniform extension can be applied continuously, and can be maintained until the plaster is quite hard, thus avoiding the cracking and breaking of the dressing which often occurs. The shortening and angulation which may exist can be overcome, and then the corrected position carefully watched during the application of the bandages; much more reliable extension is thus secured than when the force is applied by the hands of an assistant, who can never make exactly uniform tension during the entire time that is necessary.

The apparatus has been frequently used, and time has confirmed the value of the advantages which are claimed for it.—*Beiträge zur klinische Chirurgie*, Bd. XII, Heft 1, 1894.

H. P. DE FOREST (Brooklyn).